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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,875	07/20/2001	Mark Weinberg	CL-1375	3087

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EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
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1714

4

DATE MAILED: 03/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,875

Applicant(s)

WEINBERG, MARK

Examiner

Katarzyna Wyrozebski Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 11 contain limitations of “less than about” or “at least about”, which limitations render claims indefinite. With respect to the limitation of “less than about” it is not clear if the applicant claims value that is “less than” or “about” the numerical limitation. With respect to “at least about” it is not clear if the applicant claims “at least” the amount or “about” the amount.

Claim Objections

3. Claim 10 is objected to because of the following informalities: Claim 10 recites a composition of claim 1 comprising an article. The examiner is not clear as how a composition can comprise an article. For the prompt prosecution of the case, the examiner will treat the

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claims as an article claim requiring the composition of claim 1. Appropriate correction is required.

4. Claims 9 and 17 are objected to because of the following informalities: Claims 9 and 17 contain limitation of "inorganic filler" whereas independent claims recite "mineral fillers". Since not all inorganic fillers are minerals, the applicant is required to make proper correction.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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7. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashima (US 3,926,873) in view of Metzemacher (US 5,827,906).

Examples 14 to 14-3 of Ashima disclose composition comprising polyhexamethylene adipamide, known as nylon-6, with calcium carbonate having average particle size of 1.4 microns (col. 11). Table 12 (col. 21) discloses the amounts of the two components utilized in those particular examples. Polyamide is utilized in amounts of 50 and 75 and calcium carbonate is utilized in the amount of 25 and 50 parts by weight.

The Abstract as well as Claim 1 of Ashima further enables one of ordinary skill in the art to utilize the amount of calcium carbonate in a range of 10-85 parts by weight.

The inorganic calcium carbonate is treated with unsaturated carboxylic acids, utilized in amount of 0.05-20 parts by weight of calcium carbonate (Abstract and Claim 1).

The Abstract of the prior art of Ashima also discloses that one of ordinary skill in the art could utilize metal oxide. In addition, the inorganic filler of Ashima is pulverized into a powder; therefore its aspect ratio will obviously be less than 5.

In the process of the prior art of Ashima, the components are mixed together at a temperature, which would melt the polymer (col. 5, lines 7-11) then molded into an article (col. 6, lines 45-50).

The inorganic powder of Ashima is treated with unsaturated carboxylic acid in order to improve processability of the inorganic powder.

The difference between the present invention and the disclosure of the prior art of Ashima, is teaching, that the processability can also be improved utilizing saturated fatty acids, amount of the fatty acid and explicit recitation of the titanium dioxide.

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With respect to the above differences, the prior art of Metzemacher discloses thermoplastic composition, which comprises modified mineral filler. The thermoplastic of the prior art of Metzemacher can be polyamide (col. 3, line 24).

The inorganic filler of the prior art of Metzemacher include calcium carbonate and titanium dioxide (col. 1, lines 35-40).

The fillers of the prior art of Metzemacher are treated with preferably saturated fatty acid (col. 2, lines 41-43), their salts and derivatives. Listed examples of saturated fatty acids include stearic acid, lauric acid, myristic acid, palmitic acid, oleic acid and linoleic acid (col. 2, lines 37-39). Examples disclose use of ketostearic acid (Example 2), mixture of stearic acid and lauric acid (Example 8), stearic acid modified with glycidyl methacrylate (Example 7). Fatty acid of Metzemacher is utilized in 0.05-5 parts per 100 parts of filler.

The fillers are modified with the fatty acid in order to improve dispersability of the filler within polymer matrix during processing, wherein improving dispersability is equivalent to improving processability.

In the light of the above disclosure, it would have been obvious to one of ordinary skill in the art at the time of the instant invention, to utilize saturated fatty acid of Metzemacher to modify fillers of Ashima and thereby obtain the claimed invention. Utilizing fatty acids of Metzemacher would also modify the surface of the mineral filler and thereby improve processability.

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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Following disclosures are applicable against present invention, but do not qualify as a prior art: Nakai (US 2002/0102404) and Beauchemin (US 6,476,111).

Specification

9. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


KIWL
March 12, 2003